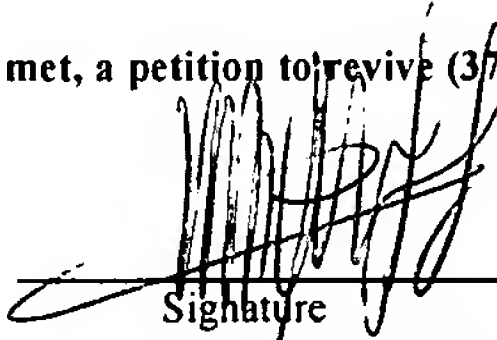


|  |   |   |
|--|---|---|
| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>  |   | ATTORNEY'S DOCKET NUMBER<br><b>2003882-0043</b><br>(P36186US-M/ECC/CC)              |
|  |   | U.S. APPLICATION NO. (If known, see 37 CFR 1.5)<br>To be assigned <b>2003882015</b> |
| INTERNATIONAL APPLICATION NO.<br><b>PCT/GB2005/000002</b>  | INTERNATIONAL FILING DATE<br><b>January 5, 2005</b> | PRIORITY DATE CLAIMED<br><b>January 6, 2004</b>                                     |
| TITLE OF INVENTION<br><b>NANOPOROUS/MESOPOROUS PALLADIUM CATALYST</b>  |   |   |
| APPLICANT(S) FOR DO/EO/US<br><b>Kucernak, et al.</b>   |   |   |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:  |   |   |
| 1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.<br>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.<br>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.<br>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).<br>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).<br/> <b>Publication WO2005/067082A2 (39 pp., including front page and 6 sheets of formal drawings)</b></li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ul> 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)). <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ul> 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)). <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendment has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ul> 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).<br>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. (c)(4)).<br>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).<br><b>Items 11 to 20 below concern document(s) or information included:</b><br>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.56, 1.97 and 1.98. ( <b>6 pp.</b> ) with PTO Form 1449 ( <b>1 pg</b> ) and Cited Art ( <b>7 references, 4 enclosed</b> )<br>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.<br>13. <input checked="" type="checkbox"/> A preliminary amendment. ( <b>7 pp.</b> )<br>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.<br>15. <input checked="" type="checkbox"/> A substitute specification ( <b>26 pp</b> )<br>16. <input type="checkbox"/> A power of attorney and/or change of address letter.<br>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.<br>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).<br>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).<br>20. <input checked="" type="checkbox"/> Other items or information: |   |   |

| U.S. APPLICATION NO.<br>(if known, see 37 CFR 1.5)   |              | INTERNATIONAL APPLICATION NO.   |            | ATTORNEY'S DOCKET NUMBER            |                 |
|--|--------------|---|------------|-------------------------------------|-----------------|
| 10/569015<br><b>TO BE ASSIGNED</b>   |              | PCT/GB2005/000002   |            | 2003882-0043<br>(P36186US-M/ECC/CC) |                 |
| 21. The following fees are submitted:  |              |   |            | Applicant use                       | Office use only |
| <input checked="" type="checkbox"/> a) Basic national fee .....\$300.00  |              |   |            | \$ 300.00                           |                 |
| <input checked="" type="checkbox"/> b) Examination fee.....\$200.00  |              |   |            | \$ 200.00                           |                 |
| <input checked="" type="checkbox"/> c) Search fee (International Search Report prepared by an ISA other than the US).....\$400.00  |              |   |            | \$ 400.00                           |                 |
| TOTAL OF ABOVE CALCULATIONS =.....\$900.00   |              |   |            | \$ 900.00                           |                 |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. |              |   |            |                                     |                 |
| Total Sheets   | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE       |                                     |                 |
| 46 - 100 =   | /50 =        |   | x \$250.00 | \$ 0.00                             |                 |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).  |              |   |            | \$ 130.00                           |                 |
| CLAIMS   | NUMBER FILED | NUMBER EXTRA  | RATE       |                                     |                 |
| Total claims   | 48- 20 =     | 28  | x \$50.00  | \$ 1,400.00                         |                 |
| Independent claims   | 1 - 3 =      | 0   | x \$200.00 | \$ 0.00                             |                 |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)  |              |   | \$360.00   | \$ 360.00                           |                 |
| TOTAL OF ABOVE CALCULATIONS =  |              |   |            | \$ 2,790.00                         |                 |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.   |              |   |            | \$                                  |                 |
| SUBTOTAL =   |              |   |            | \$ 2,790.00                         |                 |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f))  |              |   |            | \$ 0.00                             |                 |
| TOTAL NATIONAL FEE =   |              |   |            | \$ 2,790.00                         |                 |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property   |              |   |            | \$ 0.00                             |                 |
| TOTAL FEES ENCLOSED =  |              |   |            | \$ 2,790.00                         |                 |
| Amount to be refunded  |              |   |            |                                     | \$              |
| Amount to be charged   |              |   |            |                                     | \$ 2,790.00     |
| a. <input type="checkbox"/> A check in the amount of \$.00 to cover the above fees is enclosed.  |              |   |            |                                     |                 |
| b. <input type="checkbox"/> Please charge my Deposit Account No. <u>03-1721</u> in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed   |              |   |            |                                     |                 |
| c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>03-1721</u> . A duplicate of this sheet is enclosed.                                 |              |   |            |                                     |                 |
| d. <input checked="" type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.    |              |   |            |                                     |                 |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.  |              |   |            |                                     |                 |
| SEND ALL CORRESPONDENCE TO:  |              |   |            |                                     |                 |
| Patent Group<br>Choate, Hall & Stewart LLP<br>Two International Place<br>Boston, Massachusetts 02110<br>Tel: 617-248-5000<br>Fax: 617-248-4000 Dated: June 28, 2006  |              |   |            |                                     |                 |
| <br>Signature<br>Nadège M. Lagneau, Ph.D.<br>Name<br>51,908<br>Registration Number  |              |   |            |                                     |                 |

- ☐ PCT Request ( pg.)
- ☒ Written Opinion of the International Searching Authority (11 pp)
- ☐ Notification of International Application No. and Filing Date ( pg.)
- ☒ International Search Report (6 pp.)
- ☒ Return Postcard
- ☒ Certificate of Express Mail (1 pg)
- ☒ Credit Card Payment Form (1 pg)
- ☐ Notification of Receipt of Record Copy ( pg., incl. cover sheets)
- ☐ Notification Concerning Submission or Transmittal of Priority Document ( pg.)
- ☐ Statement Under 37 CFR § 1.821 ( pg.)
- ☐ Paper Copy of Sequence Listing ( pg.)
- ☒ Marked up Specification ( 27 pp)
- ☒ Formal Drawings (6 sheets)

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Docket No.: 2003882-0043 (P36186US-M/ECC/CC)  
Customer No. 24280

2003882-0043  
JUN 29 2006

**ATTORNEY'S DOCKET NUMBER: 2003882-0043 (P36186US-M/ECC/CC)**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|                      |  |           |                |
|----------------------|--|-----------|----------------|
| Applicant:           | Kucernak, et al.                         | Examiner: | To be assigned |
| Serial No.:          | To be assigned                           | Art Unit: | To be assigned |
| Filing Date:         | June 29, 2006                            | Conf. No: | To be assigned |
| From Int. Appl. No.: | PCT/GB2005/000002                        |           |                |
| Intl Filing Date:    | January 5, 2005                          |           |                |
| Priority Date:       | January 6, 2004                          |           |                |
| Title:               | NANOPOROUS/MESOPOROUS PALLADIUM CATALYST |           |                |

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Signature

Mary B. Wilson

Printed Name

**TRANSMITTAL LETTER**

Enclosed **for filing** in the above-referenced patent application, please find the following documents:

1. Transmittal Letter to the United States Designated Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. § 371 in duplication (3 pp);
2. Copy of the Published International Application WO2005/067082A2 (39 pp);
3. Preliminary Amendment (7 pp);
4. Marked-up Specification (27 pp);
5. Substitute Specification (26 pp);
6. Formal Drawings (6 sheets);
7. International Search Report (6 pp);
8. Statement Filed Pursuant To The Duty Of Disclosure Under 37 CFR §§1.56, 1.97 and 1.98 (6 pp);
9. Form PTO-1449 (1 pg);
10. Cited Art (7 references, 4 enclosed);
11. Written Opinion of the International Searching Authority (11 pp);
12. Certificate of Express Mail (1 pg);
13. Credit Card Payment Form in the amount of \$ **2,790.00** representing the Filing Fee for new '371 application (1 pg); and
14. Return Post Card.

Express Mail No.: EV 853903715 US

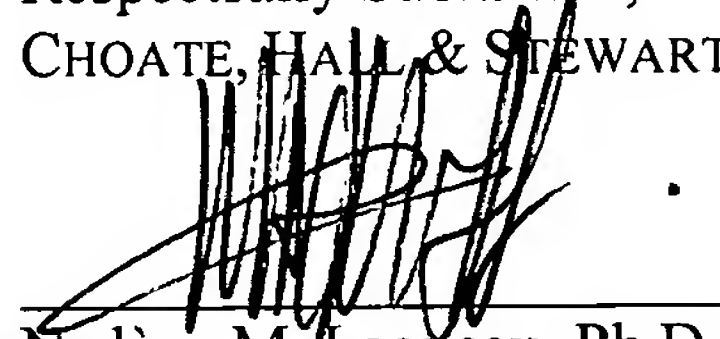
Attorney Docket No.: 2003882-0043  
Client Ref.: P36186US-M/ECC/CC

20/585015

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Please charge any additional fees associated with this filing, or apply any credits, to our Deposit Account No. 03-1721.

Respectfully Submitted,  
CHOATE, HALL & STEWART LLP



Date: June 29, 2006

Nadège M. Lagneau, Ph.D.  
Reg. No.: 51,908

**Customer No. 24280**

PATENT DEPARTMENT  
CHOATE, HALL & STEWART LLP  
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Boston, Massachusetts 02110  
Telephone: (617) 248-5000  
Facsimile: (617) 248-4000

2  
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**ATTORNEY'S DOCKET NUMBER: 2003882-0043 (P36186US-M/ECC/CC)**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|                      |  |           |                |
|----------------------|--|-----------|----------------|
| Applicant:           | Kucernak, et al.                         | Examiner: | To be assigned |
| Serial No.:          | To be assigned                           | Art Unit: | To be assigned |
| Filing Date:         | June 29, 2006                            | Conf. No: | To be assigned |
| From Int. Appl. No.: | PCT/GB2005/000002                        |           |                |
| Intl Filing Date:    | January 5, 2005                          |           |                |
| Priority Date:       | January 6, 2004                          |           |                |
| Title:               | NANOPOROUS/MESOPOROUS PALLADIUM CATALYST |           |                |

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Attorney Docket No.: 2003882-0043  
Client Ref.: P36186US-M/ECC/CC